that species. It is closely allied, if not identical, with my domifex, and though the markings are different they are not any more, perhaps, than attains in different sexes of the Lycosida.

The points wherein the male *nidifex* differs from the description given above are as follows: There is a dark band one-third the width of the abdomen on the venter and the whole coloring above and below on the body is darker; a noteworthy difference occurs on the legs underneath; the third and fourth joints of all the legs are darkest, getting lighter toward the extremities, while in *domifex* the dark markings are confined to the last three joints of the first and second pair of legs. There are apparently no markings on the upper surface of the abdomen in the alcoholic example under consideration.

It is hoped a study of more material the coming summer will bring forth new light on these interesting members of the *Lycosidæ*.

## NEW MYRMELEONIDAE.

By NATHAN BANKS

Acanthaclisis hageni n. sp.

Very similar to A congener, and may be best described by comparison with that species. The vertex is shining black (not shining in A. congener) and there are transverse lines of white hairs, and two patches of them behind; pronotum has two small spots in front farther apart than in A. congener, and outside of them two others, near the middle of each side is a large pale spot, and a transverse one each side on the hind margin, (in A. congener there are two pale spots in front, a row of three each side, and two transverse ones on the hind margin); on the middle of mesothorax in front there are two large oblique pale marks (in A congener there are four subequal spots forming a square); on mesoscutellum the pale spots are much The veins of the wings are less interrupted with pale and those of the posterior part are almost wholly black. The wings are narrower than in A congener, especially noticeable in the middle of the hind border. The radial sector has ten branches, seven before the last transversal before the pterostigma (in A congener there are eight branches, five before the last transversal before the pterostigma. Phænix, Arizona, May [Dr. Kunze].

Brachynemurus maculosus n. sp.

Face yellow, between and above antennæ a large dark area from eye to eye, sometimes showing a pale double spot in the center, the dark is continued over upon the vertex in the middle; antennæ brown; palpi pale, last article dark at tip; prothorax moderately

short, vellow, with four brown lines, the lateral ones only reach the sulcus; anterior part of mesothorax mostly dark brown, with a pale narrow stripe each side, each lateral lobe shows a small pale spot above the base of fore wing; scutellum of mesothorax pale with a medium dark stripe (not one each side as in most species); metathorax pale with a median brown spot forked and divergent in tront, sides dark brown; pleura of thorax almost wholly dark; legs pale vellow, without marks except base and apex of the tarsi dark; abdomen pale at base, lineate with dark, dark at tip; wings hyaline, costal's forked only near tip, three transversals before the radial sector, pterostigma pale, dark on base; veins dark, interrupted with pale, except the vein behind radial sector which is wholly pale, at one end of most of the transversals (including those ending on radial sector and fork of same) there is a large dark spot, also creat and of each costal and a rather larger mark terminating the pale vein near the tip of wing; hind wings much less marked. Length to tip of wings, 20 mm.

Tehama, California, August [A. P. Morse].

This species belongs in the group of *B. abdominalis* which may be distinguished by having a median stripe on the mesoscutellum, and a wholly pale vein behind the radial sector. The four species may be separated as follows:

- 2—Spots along radial sector, small species.......MACULOSUS.
  No spots along radial sector..........BLANDUS.
  2—Spots scattered, basal part of radial sector interrupted with

Brachynemurus blandus Hag.

B. cognilletti Currie.

There is, I think, no doubt that Currie's species is identical with Hagen's. The peculiar markings of the pronotum in *B. coquilletti* agree with those ascribed by Hagen to *B. blandus*, and to no other form. There is considerable variation in size in this as in other species of the genus.

Brachynemurus pallidus n. sp.

Pale yellowish, dark around bases of antennæ, two dark spots on vertex, tips of palpi dark, antennæ pale brownish; prothorax shows only the lateral stripes and these are very indistinct, but each tip shows a prominent dark dot at the sulcus; thorax with a few dark spots, no signs of marks on mesoscutellum; aldomen pale yellow, with a median and lateral dark line, apex obscure; legs pale yellow, unmarked, except the joints of tarsi are tipped with dark; wings clear, without marks, veins dark, interrupted with pale, but without any adjoining clouds, pterostigma darker at base; hind

wing similar to fore wing; costals forked only near the pterostigma one to three transversals basad of radial sector. Length  $\circ$  18 mm, expanse 37 mm. Phœuix, Arizona, September [Dr. Kunze].

Nearer to B. minusculus than to any other species, but easily separated from that by the lack of median lines on the pronotum, un-

marked hind femora, etc.

## SOME NEW SPECIES OF ATHYSANUS.

BY E. D. BALL, Fort Collins, Colo.

Athysanus frigidus, n. sp.

General appearance of A. exitiosa broader and shorter. As broad as obsoletus, with a rounder vertex. Length, % 4-4.5mm, 3.5mm; width, % 1.6mm, 3.5mm.

Vertex two and one half times wider than long, half longer on middle than against eye, the surface sloping and broadly rounding to the tumid front; ocelli distant from eyes; front wider than long, twice wider at apex than the parallel margined elypeus; pronotum half longer than vertex, lateral margins very short, humeral margins long, rounding; elytra slightly longer than the body in both sexes, narrowing behind, venution normal, apical cells rather short

Color: Grayish or brownish white; a large oval spot on either side the middle of the anterior margin of the vertex, a large round one between the occili and the eyes, sometimes three small ones on the disc, forming a triangle, a pair of elongate marks on the pronotum back of the anterior margin and a pair of spots on the disc of the scutellum, black; elytra covered with a whitish "bloom," the nervures obscure; face light, a pair of large spots below those on the vertex, another pair, irregular in shape, near the apex of front. Light colored specimens may lack some of the spots on face, while darker ones—and the males as a rule have brown stripes—between the light veins of the elytra.

Genitalia: Female, ultimate ventral segment twice longer than penultimate, shallowly emarginate posteriorly, with a broad, slightly, roundingly, bilobed, median tooth: pygofers twice longer than wide, equaling the ovipositor; male, ultimate ventral segment long, half longer than valve, valve broad, obtusely rounding, plates broad at base, regularly narrowing to the slightly divergent points, scarcely twice longer than the valve.

Described from numerous specimens collected at Fort Collins, Colo., and back into the lower foot-hills. Found only on *Artemisia frigida*, to which the white color and powdery "bloom" of both larvæ and adults well adapt it.

Athysanus arctostaphyli, n. sp.

Shorter and stouter than A. instabilis, with shorter elytra,